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Septobasidium hoveniae sp. nov. and *S. rhabarbarinum* new to China

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Abstract —A new species, *Septobasidium hoveniae* on *Hovenia acerba* associated with *Pseudaulacaspis* sp., is described. *Septobasidium rhabarbarinum* on *Quercus pannosa* is new to China.

Key words —*Pucciniomycetes*, *Septobasidiales*, *Septobasidiaceae*, taxonomy

A new species of *Septobasidium* was discovered in the famous Huangshan Scenic Area. Owing to the mild and humid climate and plentiful rainfall, Huangshan Mountain is provided with a great biodiversity. Among *Septobasidium* specimens collected by the fourth author a new species was discovered and is described below:

Septobasidium hoveniae Wei Li bis, S.Z. Chen, L. Guo &Yao Q. Ye, **sp. nov.** Figs 1–4

Fungal Name FN570057

Differs from *Septobasidium henningsii* by its thinner hymenium.

Type: China, Anhui Province, Huangshan Scenic Area, Wenquan, alt. 640 m, on *Hovenia acerba* Lindl. (*Rhamnaceae*), associated with *Pseudaulacaspis* sp. (*Diaspididae*), 31.V.2012, Y.Q. Ye 5 (HMAS 252321, **holotype**).

ETYMOLOGY: The epithet refers to the substrate plant genus.

Basidiomata on branches, 10 cm long, 5 cm wide, cinnamon-brown; margin determinate, surface smooth, cracked at maturity, partly peeling off, emerging brown pillars. In section 600–1800 µm thick. Subiculum brown, 50–70 µm thick. Pillars brown, at first straight, later curved and confluent, and then

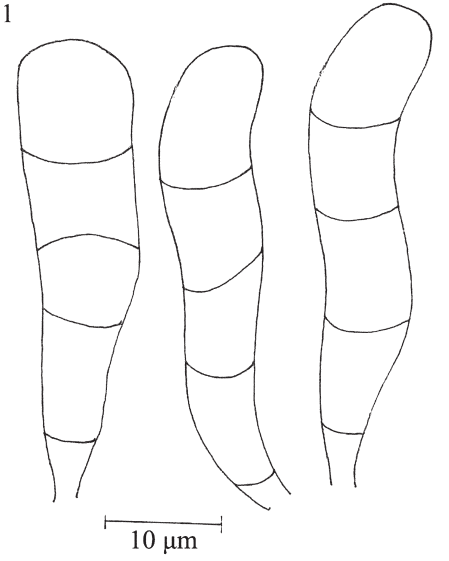

Fig 1. *Septobasidium hoveniae* (HMAS 252321, holotype). Basidia.

separable, 200–1500 μm high, 20–120 μm wide. Hyphal layer brown, 80–150 μm high. Hymenium hyaline or brownish, 100–110 μm thick. Basidia arising directly from the hyphae without a probasidial cell, cylindrical, straight or slightly curved, 4-celled, 35–45 × 7.5–9 μm, hyaline. Basidiospores not seen. Haustoria consisting of hyphae.

Comments: *Septobasidium hoveniae* is similar to *S. henningsii* Pat., which differs by having numerous fissures on the basidiome surface and a thicker and stratified hymenium, 60–400 μm high (Couch 1938).

Septobasidium rhabarbarinum (Mont.) Bres., Annls. Mycol. 14(3/4): 240, 1916. Figs 5–8

Basidiomata on branches, 2–8 cm long, 1–3 cm wide, cinnamon-brown or old golden; margin determinate, surface smooth, with numerous cracks at maturity. In section 320–700 μm thick. Subiculum brown, 20–30 μm thick. From subiculum forming brown hyphal layer, broken by channels at base. Hymenium stratose, brown or brownish, 140–150 μm thick. Basidia arising

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Figs 2–4. ***Septobasidium hoveniae*** (HMAS 252321, holotype). 2. Basidioma on branch; 3. Section of basidioma; 4. Basidium (arrow). Figs 5–7. ***Septobasidium rhabarbarinum*** (HMAS 251990). 5. Basidiomata on branches; 6. Section of basidioma; 7. Basidium (arrow).

2
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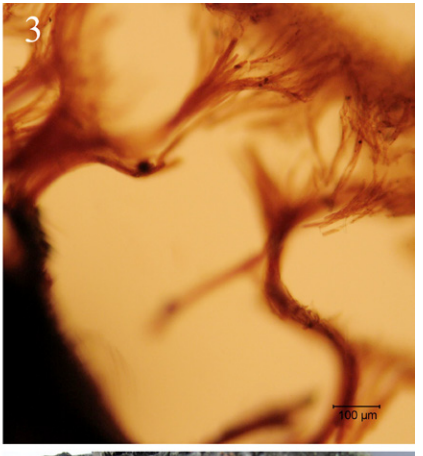
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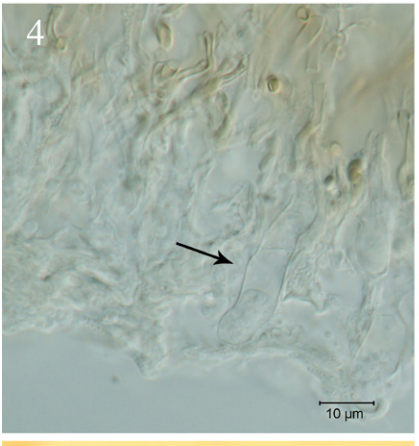
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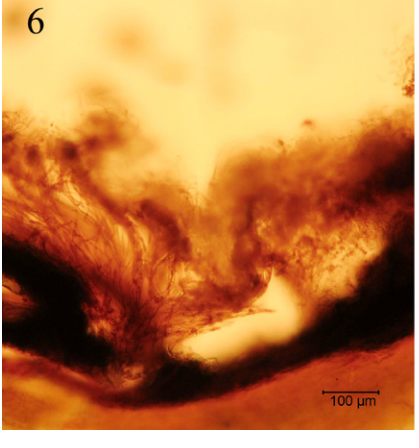
6
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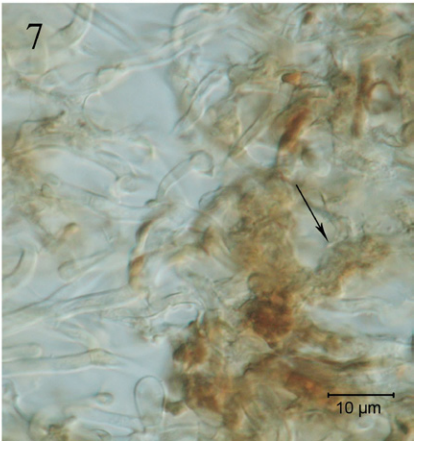
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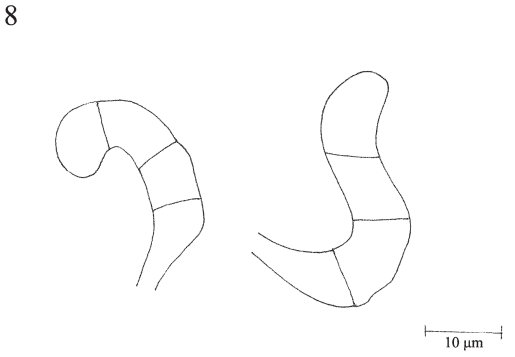

Fig 8. *Septobasidium rhabarbarinum* (HMAS 251990). Basidia.

directly from the hyphae without a probasidial cell, cylindrical, curved, 4-celled, 33–38 × 6–7 µm, brown. Basidiospores not seen. Haustoria consisting of irregularly coiled hyphae.

specimens examined: **China**, **Sichuan:** Yanyuan, Luguhu, alt. 2700 m, on *Quercus pannosa* Hand.-Mazz. (*Fagaceae*), 14. IX. 2010, Y.F. Zhu & L. Guo 342 (HMAS 251990), Y.F. Zhu & L. Guo 340 (HMAS 263425).

Comments: Our materials are much like *S. rhabarbarinum* described by Couch (1938), except that the basidia are shorter (33–38 × 6–7 µm vs. 50–68 × 6.3–7.1 µm).

Including the two species reported in this paper, 53 *Septobasidium* species have now been reported in China (Sawada 1933, Couch 1938, Teng 1963, Tai 1979, Kirschner & Chen 2007, Lu & Guo 2009a,b,c, 2010a,b,c, 2011, Lu et al. 2010, Chen & Guo 2011a,b,c,d, 2012a,b,c, Li & Guo 2013).

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